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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,882	07/03/2003	Tomonori Kojima	K-1976DIV	4187

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ALEXANDRIA, VA 22314-2848

EXAMINER

PHAN, THIEM D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/611,882

Applicant(s)

KOJIMA ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/845,185.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Onda (US 4,206,379).

As applied to claim 1, Onda teaches a process for constructing rotors for electro-mechanical transducers, comprising:

- forming a permanent magnet (Fig. 5, 12) in a ring-shape,
- concentrically arranging a rotating shaft (Fig. 4, 10; col. 4, lines 3-5) and the permanent magnet in a mold to have a space therebetween, and
- pouring a rubber material or resin (Fig. 3, 14; col. 3, line 22) in a fluid state into the space between the permanent magnet and the rotating shaft to vulcanize and mold a cushioning member having predetermined hardness so that the permanent magnet (Fig. 4, 12) and the rotating shaft (Fig. 4, 10) are integrally coupled through the cushioning member (Fig. 4, 14).

As applied to claim 6, Onda teaches that the cushioning member is formed to have a plurality of recesses (Fig. 2, 18' & 20') on opposite surfaces thereof.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onda in view of Itaya (US 5,500,994) or vice versa.

As applied to claim 2, Onda teaches a process for constructing rotors for electro-mechanical transducers, which reads on applicants' claimed invention.

Itaya teaches a method of manufacturing a rotor with mold plastic magnet (Fig. 4, 32; Abstract) encasing a mold plastic body (Fig. 4, 31) with their molding temperature quite similar (Col. 3, lines 34-52) in order to have a light rotor body weight.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the mold plastic magnet encasing a mold plastic body,

as taught by Itaya, to the molding process of Onda for constructing a rotor in order to have a light rotor body weight.

As applied to claim 3, Onda teaches a process for constructing rotors for electro-mechanical transducers, which reads on applicants' claimed invention.

Itaya teaches a method of manufacturing a rotor with the application of adhesive, as old art (Col. 1, lines 22-26; col. 2, lines 10 & 11) between the plastic magnet and the mold plastic body in order to reinforce a double structure.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the adhesive, as taught by Itaya, to the molding process of Onda for constructing a rotor in order to reinforce a double structure.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onda in view of Back (US 5,930,071) or vice versa.

Onda teaches a process for constructing rotors for electro-mechanical transducers, which reads on applicants' claimed invention.

Back teaches a process of dampening vibration of rotor disk drive by a post-cure bake (Col. 13, lines 14-22) of the molded rubber-like material in order to improve the mechanical properties of the elastomer.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the post-cure bake process, as taught by Back and not

its general structure, to the molding process of Onda for constructing a rotor in order to improve the mechanical properties of the rubber, light rotor body.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onda in view of Higuchi et al (EP0633647) or vice versa.

As applied to claim 2, Onda teaches a process for constructing rotors for electro-mechanical transducers, which reads on applicants' claimed invention.

Higuchi et al teach a process of manufacturing a rotor with vent holes (Fig. 1, 7a; Abstract) in order to reduce the temperature throughout the motor body.

It would be obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings by applying the vent holes, as taught by Higuchi et al, to the molding process of Onda for constructing a rotor in order to reduce the temperature throughout the motor body.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The

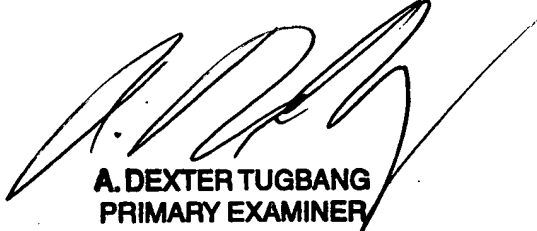
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examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan
Examiner
Art Unit 3729



A. DEXTER TUGBANG
PRIMARY EXAMINER

tp
September 3, 2005